Spring 2010 DNA Distribution

iGEM 2010 spring workshop

Distribution
Kit Plates

Linearized
Plasmid
Backbones

iGEM
Goodies!

Instructions

- **Storage**

  Kit plates: -20°C freezer

  Plasmid backbones: 4°C or lower

- **Usage**

  Not enough DNA (in kit plates) for assemblies!

  Transform and make your own glycerols

  Do NOT remove the adhesive foil cover

www.partsregistry.org/Help:Spring_2010_DNA_distribution

Protocols!

Linearized Plasmid Backbones

- New for iGEM 2010
- Ready-to-cut
  - Not yet EcoRI and PstI cut
- Useful for:
  - Parts that have been synthesized
  - Parts made with other assembly standards
    - Cannot contain RFC10 restricted enzyme sites
- Ship in pSB1C3

Finding a Part: Browse

DNA Repository Plates and Boxes

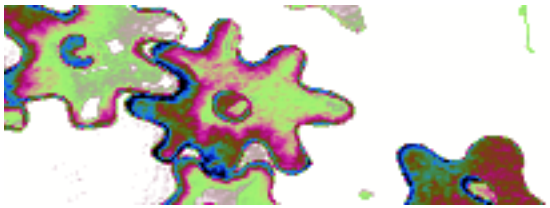
Physical DNA is held in tubes in freezer boxes or multi-well plates. This program manages the contents of boxes and plates.

Label:	**2010 Kit Plate 1**	ID: 1257
Description:	Spring 2010 Distribution Kit Plate 1	384-Well Plate
Location:		2010-04-28 19:10:37
Substance:	DNA	

Contents:

1A	BBa_J04450 (pSB1A10)	**RFP Coding Device** LacI R0010 B0034 mRFP1 E1010 B0015 
1B	BBa_J44000 (pSB1A2)	**hixC binding site for Salmonella typhimurium Hin recombinase** hixC J44000 
1C	BBa_J04450 (pSB1A3)	**RFP Coding Device** LacI R0010 B0034 mRFP1 E1010 B0015 
1D	BBa_R0010 (pSB1A2)	**promoter (lacI regulated)** LacI R0010 

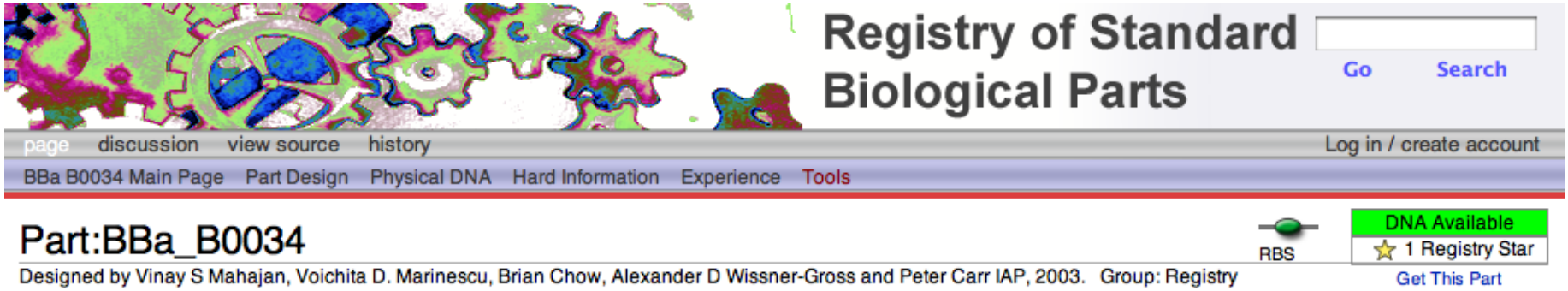
Finding a Part
Targeted Search



Registry of Standard Biological Parts

Go Search

Part Availability



Get This Part

Part:BBa_B0034:Get Part

Designed by Vinay S Mahajan, Voichita D. Marinescu, Brian Chow, Alexander D Wissner-Gross and Peter Carr IAP, 2003. Group: Registry

RBS (Elowitz 1999) -- defines RBS efficiency

There are five ways to get this part. You can find it in one of the Registry distributions, you can request it from the Registry, you can use PCR to extract it from a natural DNA sample, you can order it from a DNA synthesis company, or, for short parts, you can assemble it from oligos.

While a part is compatible with an assembly system if its sequence contains no illegal regognition sites, a part in a plasmid is compatible with an assembly standard only if the part is compatible and the plasmid provides the correct prefix and suffix for the assembly system.

CAUTION - This page is under construction.

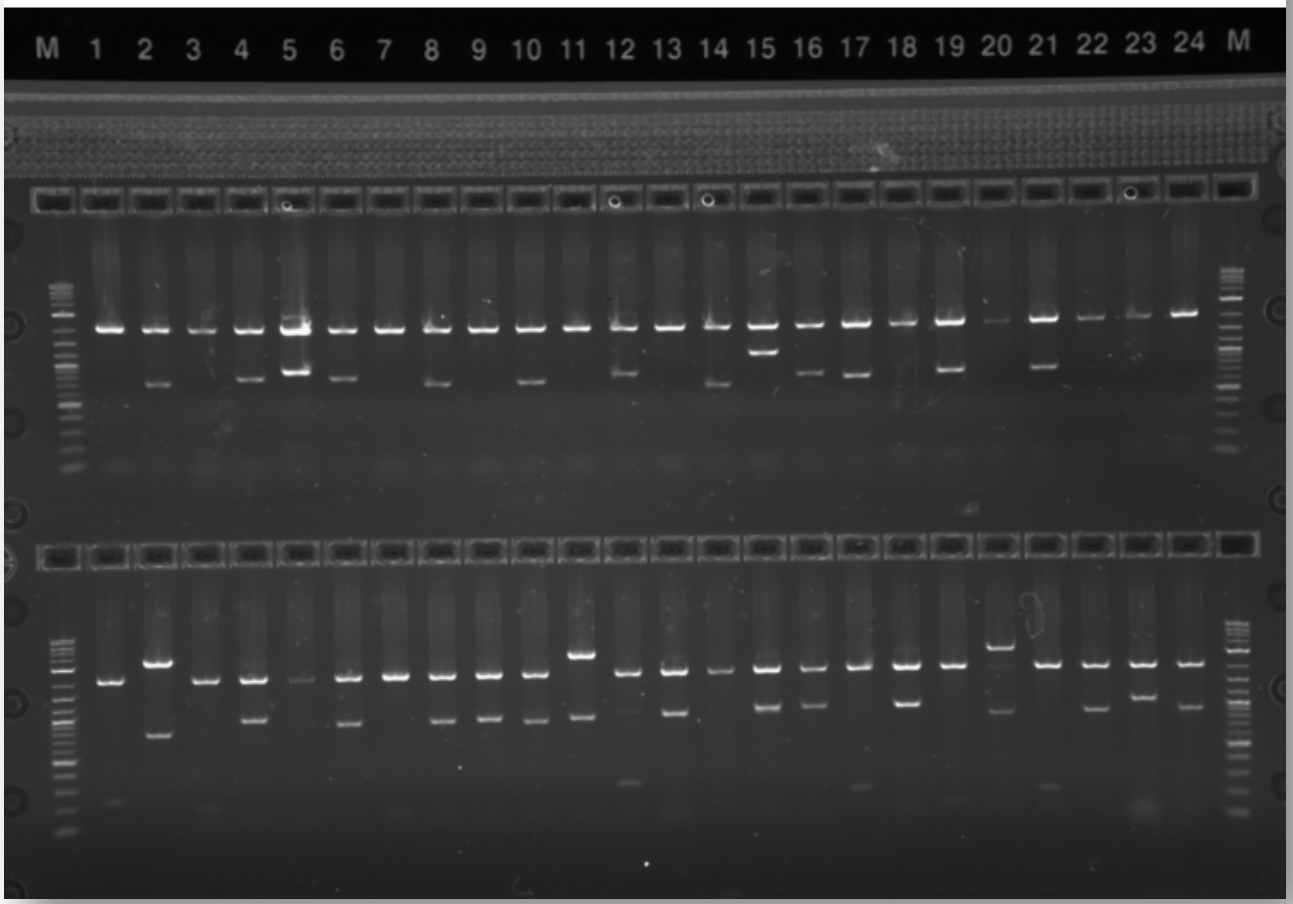
Option 1: Get the part from a Registry distribution. *More...*

Part BBa_B0034 is available in these Registry distributions: Tree View Show 8 other locations

Distribution	Plate	Well	Plasmid	Resistance
Spring 2010 Distribution	2010 Kit Plate 1	2M	pSB1A2	
	This is an aliquot plate, see the sample below for QC information			Spring 2010 Distribution>2010 Kit Plate 1>2M
	Sequencing: Confirmed	Resistance: A/A	Gel: OK Q: High P: OK	Spring 2010 Source Plates>S10 Source Plate 3001>1G
	Sequencing: Confirmed	Resistance:	Gel:	Spring 2009 Source Plates>S09 SP 2001>1G
	Sequencing: Confirmed	Resistance: A	Gel: OK Q: OK P: OK	Spring 2008 Distribution>Source Plate 1000>2E
	Sequencing:	Resistance	Gel:	iGEM 2005 (Registry 7.05)>Source Plate 1>2H

Quality Control Information: Digest Gel

				Lengths (As cut)		Insert	Plasmid	
Lane	Well	Insert	Plasmid	Insert	Plasmid	Result	Quantity	Quality
46	6G	E0240	pSB1A2	898	2058	OK	High	OK
47	6D	F2622	pSB1A2	1084	2058	OK	High	OK
48	6H	E0840	pSB1A2	900	2058	OK	High	OK



Quality Control Information: Antibiotic Test Plates

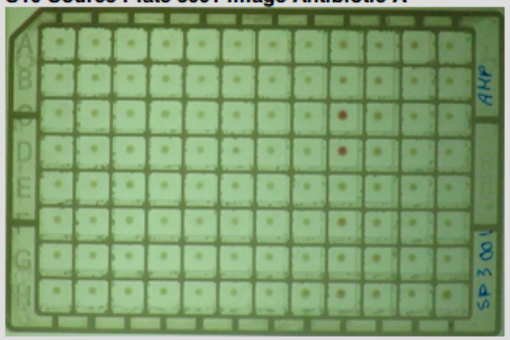
Image for plate

Use this page to manage an image of a plate.

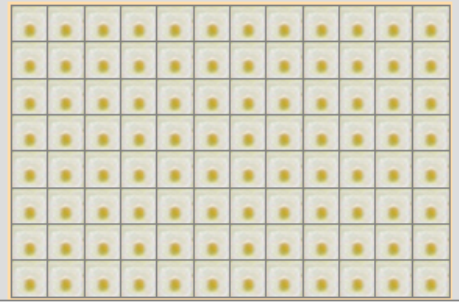
Login to edit information or upload image

Plate Information		Image Information		Image Information	
Plate:	S10 Source Plate 3001	ID:	00195	Format:	upright
Library:	Spring 2010 Source Plates	Entered:	2010-04-16 13:00:38	Type:	antibiotic
Size:	96 wells	By User:	Vinoo Selvarajah		A
Contents:	Glycerols	Delete this image			

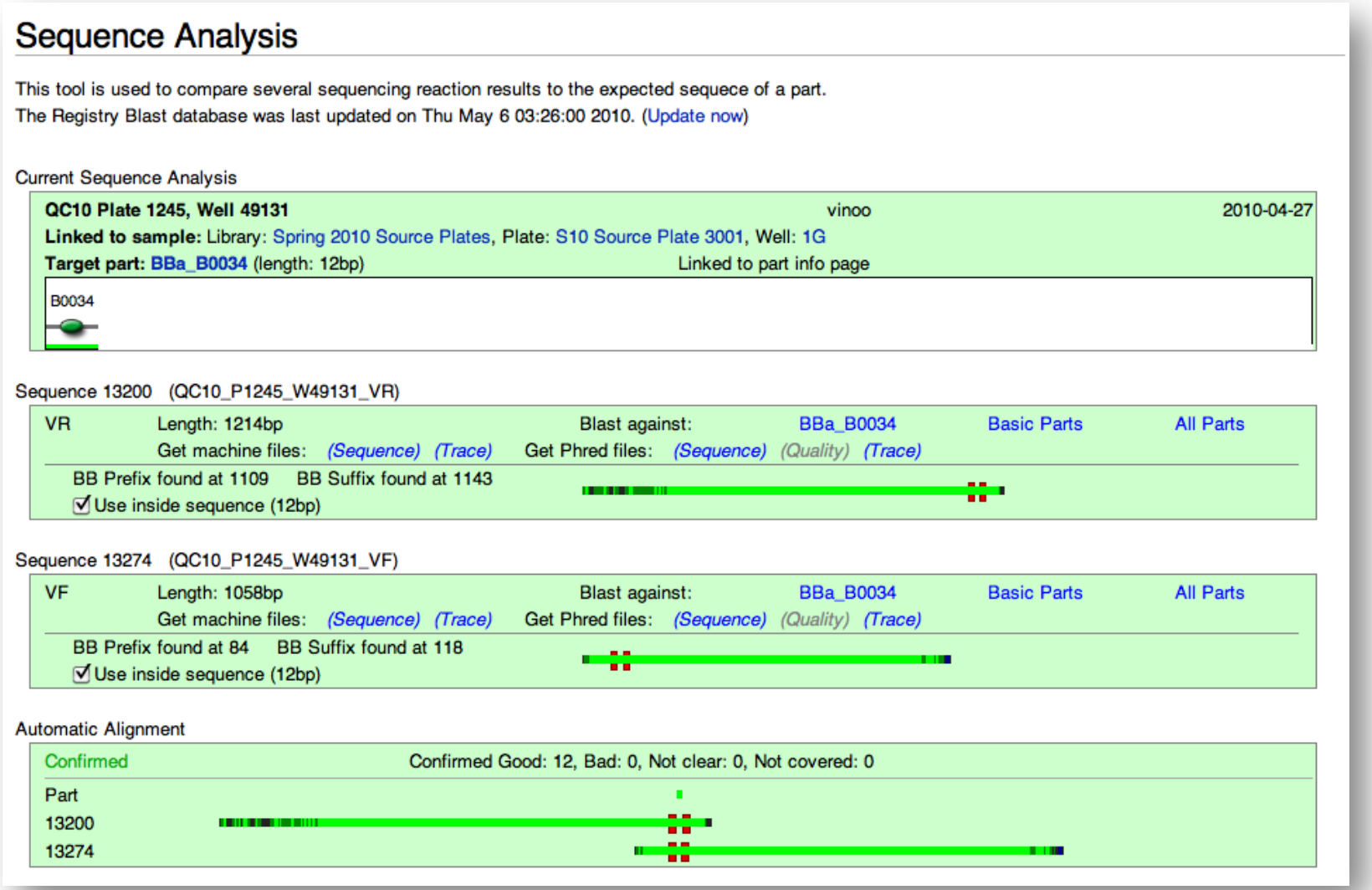
S10 Source Plate 3001 Image Antibiotic A



2010-04-16 13:00:38



Quality Control Information: Sequence Analysis



Sequence Analysis

This tool is used to compare several sequencing reaction results to the expected sequece of a part.
The Registry Blast database was last updated on Thu May 6 03:26:00 2010. (Update now)

Current Sequence Analysis

QC10 Plate 1245, Well 49131 vinoo 2010-04-27
Linked to sample: Library: Spring 2010 Source Plates, Plate: S10 Source Plate 3001, Well: 1G
Target part: BBa_B0034 (length: 12bp) Linked to part info page

B0034

Sequence 13200 (QC10_P1245_W49131_VR)

VR Length: 1214bp Blast against: BBa_B0034 Basic Parts All Parts
Get machine files: *(Sequence)* *(Trace)* Get Phred files: *(Sequence)* *(Quality)* *(Trace)*
BB Prefix found at 1109 BB Suffix found at 1143
☑ Use inside sequence (12bp)

Sequence 13274 (QC10_P1245_W49131_VF)

VF Length: 1058bp Blast against: BBa_B0034 Basic Parts All Parts
Get machine files: *(Sequence)* *(Trace)* Get Phred files: *(Sequence)* *(Quality)* *(Trace)*
BB Prefix found at 84 BB Suffix found at 118
☑ Use inside sequence (12bp)

Automatic Alignment

Confirmed Confirmed Good: 12, Bad: 0, Not clear: 0, Not covered: 0
Part
13200
13274

Distribution and Quality Control: Review

- Storage
  - -20°C for kit plates, 4°C for plasmid backbones
- Usage
  - Kit plates: make your own stock
  - Plasmid backbones: ready-to-cut
- Finding
  - Browsing
  - Targeted search
  - Get A Part page
- Evaluating
  - Restriction digest gel
  - Antibiotic test plates
  - Sequence analyses